

Review 8

1 Write each ratio in its simplest form.

(a) $5 : 25 = \square : \square$

(b) $24 : 18 = \square : \square$

(c) $56 : 72 = \square : \square$

(d) $125 : 100 = \square : \square$

(e) $123 : 369 = \square : \square$

(f) $310 : 186 = \square : \square$

2 A plank of wood is cut into two parts such that the ratio of the length of the shorter part to that of the longer part is $4 : 5$.

(a) If the original length of the plank of wood is 81 cm, what is the length of the longer part?

(b) If the length of the longer part is 100 cm, what is the length of the shorter part?

(c) If the length of the shorter part is 84 cm, what is the original length of the plank of wood?

- 3 In a section of a library, there are cookbooks, mystery books and puzzle books. The ratio of the number of cookbooks to the number of mystery books is $5 : 2$. The ratio of the number of puzzle books to the number of cookbooks is $4 : 3$. There are 120 puzzle books. Find the total number of books.

- 4 Emma buys a pack of stickers that contains furry stickers, shiny stickers and glow-in-the-dark stickers. The ratio of the number of furry stickers to the number of shiny stickers is $3 : 5$. There are 32 fewer glow-in-the-dark stickers than furry stickers. There are 221 stickers altogether. Find the number of glow-in-the-dark stickers in the pack.

- 5 The ratio of the number of boys to the number of girls in a hall is 6 : 5. When 20 girls leave the hall and 20 boys enter the hall, the ratio becomes 2 : 1. How many children were there in the hall at first?

Mind Workout

Date: _____

In a shop, a lemon pie costs £3 while a cherry pie costs £7. The ratio of the number of lemon pies to the number of cherry pies sold in a day was 3 : 7. A total of £1160 was collected from the sale of both kinds of pie. How many lemon pies and how many cherry pies were sold?

